

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of	)	
	)	
Implementing Kari’s Law and Section 506 of	)	PS Docket No. 18-261
RAY BAUM’S Act	)	
	)	
Inquiry Concerning 911 Access,	)	
Routing, and Location in Enterprise	)	PS Docket No. 17-239
Communications Systems	)	

**REPLY COMMENTS OF RINGCENTRAL, INC.**

Rachel Warnick Petty  
Assistant General Counsel  
RINGCENTRAL, INC.  
20 Davis Drive  
Belmont, CA 94002  
(650) 458-4110

Brita D. Strandberg  
Susannah J. Larson  
HARRIS, WILTSHIRE & GRANNIS LLP  
1919 M Street, NW, 8<sup>th</sup> Floor  
Washington, DC 20036  
(202) 730-1300

*Counsel to RingCentral, Inc.*

February 8, 2019

## TABLE OF CONTENTS

I.	Introduction.....	1
II.	The Commission Should Adopt Clear and Flexible MLTS Rules. ....	1
A.	The Record Supports the Need for Clarification that MLTS Notification and Dispatchable Location Requirements Apply Only On-Site, for Systems with at Least 50 Lines at a Single Location.....	2
B.	The Commission Should Ensure that the MLTS Rules Apply on a Technology-Neutral Basis, While Maintaining the Service-Specific Rules outside of MLTS Use. ....	5
C.	The Record Supports the Need to Clearly Allocate Responsibility between Manufacturers, Sellers, Installers, Operators, and Managers. ....	8
D.	The Commission’s Proposal that MLTS Systems Must Be “Pre-Configured” Does Not Align with the Way Cloud-Based MLTS Is Deployed.....	11
III.	The Commission Should Ensure that the 911 Rules Are Technically Feasible and Do Not Stifle Innovation.....	12
IV.	Conclusion .....	16

## **I. INTRODUCTION**

As a leading provider of interconnected Voice over Internet Protocol (VoIP), cloud-based PBX, and unified communications services to large and small business customers, RingCentral, Inc. (“RingCentral”) is committed to providing robust 911 solutions that meet customer demands. RingCentral supports the Commission’s efforts to adopt 911 requirements for multi-line telephone systems (“MLTS”) and other services under Kari’s Law and RAY BAUM’S Act.<sup>1</sup> In doing so, the Commission should ensure that it adopts clear and flexible MLTS rules. Specifically, the Commission should (1) clarify that the notification and dispatchable location requirements for MLTS apply only on-location at sites where MLTS is deployed; (2) ensure that its MLTS rules apply on a technology-neutral basis, while maintaining the distinctions between the service-specific rules outside of the MLTS context; (3) clarify the allocation of responsibility for MLTS stakeholders; and (4) clarify the definition of “pre-configured” in the MLTS rules. The Commission should also ensure that its rules are technologically feasible and do not stifle innovation. Specifically, the Commission should ensure that location requirements for interconnected VoIP remain flexible.

## **II. THE COMMISSION SHOULD ADOPT CLEAR AND FLEXIBLE MLTS RULES.**

The record in this proceeding confirms the importance of adopting clear MLTS rules. Clarity—along with flexibility<sup>2</sup>—will ensure that stakeholders know their obligations and can apply them in a way that makes sense for each system and enterprise.

---

<sup>1</sup> *Implementing Kari’s Law and Section 506 of RAY BAUM’S ACT*, Notice of Proposed Rulemaking, FCC 18-132, PS Docket Nos. 18-261 and 17-239 ¶ 1 (rel. Sept. 26, 2018) (“NPRM”).

<sup>2</sup> *See, e.g.*, Comments of Panasonic at 5, PS Docket Nos. 18-261 and 17-239 (filed Dec. 10, 2018) (“Panasonic Comments”) (Any MLTS 911 regulations adopted, particularly for small-

**A. The Record Supports the Need for Clarification that MLTS Notification and Dispatchable Location Requirements Apply Only On-Site, for Systems with at Least 50 Lines at a Single Location.**

Consistent with RingCentral’s comments, the Commission should clarify that the notification and dispatchable location requirements apply only at facilities where MLTS is deployed on-site, for systems with at least 50 lines at a single location, and where the MLTS customer controls the network.<sup>3</sup> These clarifications will address many of the logistical concerns that commenters raised about these requirements for uses off-site and for smaller enterprises.

The notification requirement does not make sense outside of the traditional, on-site enterprise campus setting, or for smaller enterprises.<sup>4</sup> As AT&T explains, for small businesses, “the obligations to provide central notification of emergency calls and station-level dispatchable location are unwieldy and of limited value to first responders.”<sup>5</sup> Central notification would “serve little purpose in an office where all employees sit in a single small room” and “the extraneous information could even create confusion.”<sup>6</sup> The Voice on the Net (“VON”) Coalition also proposes that small businesses should be exempt from the requirements of Kari’s Law

---

and medium-sized businesses . . . must . . . enable access to 911 while providing sufficient flexibility to businesses to meet their communications needs without undue disruption”); *see also* Comments of RedSky Technologies at 4, PS Docket Nos. 18-261 and 17-239 (filed Dec. 10, 2018) (“RedSky Comments”) (“[W]e do not believe that every MLTS user should be required to have access of [sic] an emergency call notification let alone staff to receive a notification. There are many circumstances where there is no one to consume the data and react.”).

<sup>3</sup> See Comments of RingCentral at 2, 8, PS Docket Nos. 18-261 and 17-239 (filed Dec. 10, 2018) (“RingCentral Comments”).

<sup>4</sup> RingCentral Comments at 3.

<sup>5</sup> Comments of AT&T at 4, PS Docket Nos. 18-261 and 17-239 (filed Dec. 10, 2018) (“AT&T Comments”).

<sup>6</sup> AT&T Comments at 4-5.

notification.<sup>7</sup> And Panasonic notes that “a small business which uses a building MLTS system, but does not exercise control over the system, should not be considered to be responsible for adherence to the well-designed mandates of Kari’s Law.”<sup>8</sup>

Along these same lines, a central notification where a remote worker makes a 911 call using its company’s multi-line system off-site would only create confusion.<sup>9</sup> As the Ad Hoc Users Telecommunications Committee notes, “the Commission should grant enterprise owner/operators the flexibility to develop individualized solutions that take into account their wide variety of workplace scenarios and network technologies, including on-site and local emergency response capabilities.”<sup>10</sup>

Likewise, there are similar challenges with providing an accurate dispatchable location outside of on-site MLTS use<sup>11</sup> and for small enterprises.<sup>12</sup> As Cisco explains, “generat[ing] . . . a dispatchable location is more supportable from *on-premises* MLTS, particularly hardwired fixed-location desk phones.”<sup>13</sup> But “[i]n comparison to on-premises network deployments, it is even

---

<sup>7</sup> Comments of the Voice on the Net Coalition at 11, PS Docket Nos. 18-261 and 17-239 (filed Dec. 10, 2018) (“VON Comments”).

<sup>8</sup> Panasonic Comments at 9.

<sup>9</sup> See RingCentral Comments at 3.

<sup>10</sup> Comments of Ad Hoc Telecommunications Users Committee at 4, PS Docket Nos. 18-261 and 17-239 (filed Dec. 10, 2018) (“Ad Hoc Comments”); see also Comments of the American Hotel & Lodging Association at 6-7, PS Docket Nos. 18-261 and 17-239 (filed Dec. 10, 2018) (supporting notification requirement “provided that hotels are provided sufficient flexibility in meeting the rule.”).

<sup>11</sup> See, e.g., Comments of Cisco at 17, PS Docket Nos. 18-261 and 17-239 (filed Dec. 10, 2018) (“Cisco Comments”).

<sup>12</sup> See, e.g., Comments of NCTA – The Internet & Television Association at 6, PS Docket Nos. 18-261 and 17-239 (filed Dec. 10, 2018); AT&T Comments at 4.

<sup>13</sup> Cisco Comments at 17.

more challenging, if not impossible, to generate automatic dispatchable location for off-premises softphones using the public Internet or VPN connections.”<sup>14</sup> TIA also confirms that “[a]s employees move off premises, the challenges of locating a user on a network over which the enterprise has no control is even more daunting.”<sup>15</sup>

The Commission should therefore clarify that the notification and dispatchable location requirements do not apply outside of on-site MLTS use,<sup>16</sup> or to MLTS with fewer than 50 lines at a single location. This approach would mirror the approach of many states’ MLTS 911 rules, which frequently incorporate “cutoffs for small businesses in their MLTS 911 requirements”<sup>17</sup> such as a minimum number of lines or square footage at a site.<sup>18</sup> RingCentral agrees with

---

<sup>14</sup> Cisco Comments at 18; *see also id.* (“While solutions exist that allow or prompt remote employees to manually update their location when using a softphone, there is a clear trade-off between prompting such updates and user fatigue. And it is virtually impossible to validate that the caller truly is where they say they are, which can lead to misroutes.”).

<sup>15</sup> Comments of the Telecommunications Industry Association at 18, PS Docket Nos. 18-261 and 17-239 (filed Dec. 10, 2018) (“TIA Comments”) (“Ensuring accurate location data is difficult, if not impossible, for an end-user connected remotely to an enterprise via a VPN.”).

<sup>16</sup> *See* Panasonic Comments at 18 (“When an employee uses an IP-capable client off-premises, dispatchable location should not be required at this time . . . there is no way to locate such callers today without requiring the purchase of expensive third party services that require manual location entry.”).

<sup>17</sup> *See* AT&T Comments at 5 (proposing “that businesses under 40,000 square feet need only provide a street address as the dispatchable location and that such businesses are exempted from the central notification rules,” consistent with Maine and Illinois’ statutes).

<sup>18</sup> *See* RingCentral Comments at 7 (citing 560 CMR 4.04 (Massachusetts requirements governing MLTS, containing exemptions for businesses with less than 7,000 square feet in a single contiguous property or fewer than 49 stations and 22,500 square feet in a single contiguous property); Va. Code. §§ 56- 484.19 (Virginia requirements, providing alternative compliance for facilities with contiguous areas of fewer than 7,000 square feet); RCW 80.36.560 (Washington requirements for enhanced 911 for business service limited to businesses exceeding 25,000 square feet, businesses on more than one floor of a building, or businesses in multiple buildings); 50 ILCS 750/15.6 (Illinois Enhanced 911 service and business service requirements, limiting requirements based on, among other things, whether a building has less than 40,000 square feet)).

commenters that the Commission should also clarify that business owners should be responsible for determining whether they fall within these requirements.<sup>19</sup>

**B. The Commission Should Ensure that the MLTS Rules Apply on a Technology-Neutral Basis, While Maintaining the Service-Specific Rules outside of MLTS Use.**

Provided the Commission clarifies the instances where the MLTS requirements apply (*i.e.*, for MLTS deployed on-site, with more than 50 lines at a single location), RingCentral echoes commenters concerns that the MLTS requirements should apply on a technology-neutral basis, across all platforms. This is important so that MLTS customers can be confident in the systems their providers are enabling without having to become expert in the many technologies underlying these solutions. Outside of the MLTS context, however, RingCentral urges the Commission to maintain its service-specific 911 requirements.

RingCentral agrees with AT&T that “[a]s technologies continue to develop, there may be more options than ever for consumers to employ different types of systems to meet their MLTS needs.”<sup>20</sup> Accordingly, “the Commission should ensure that the MLTS rules maintain regulatory parity between new implementations of business VoIP services and traditional MLTS business solutions where such capabilities are technically feasible.”<sup>21</sup>

---

<sup>19</sup> See VON Comments at 12; AT&T Comments at 5.

<sup>20</sup> AT&T Comments at 6.

<sup>21</sup> *Id.*; see also Comments of Bandwidth Inc. at 3, PS Docket Nos. 18-261 and 17-239 (filed Dec. 10, 2018) (“Bandwidth Comments”) (“Bandwidth believes uniform federal regulations that compel all necessary parties in today’s technologically advanced MLTS environments to ensure effective 911 calling is enabled are necessary”); RedSky Comments at 6 (The Commission should “[o]pen up the terminology regarding end points as the technology is constantly evolving”).

Many commenters highlight the importance of ensuring consistent application and reliable 911 delivery and routing.<sup>22</sup> In the MLTS context, RingCentral agrees with the National Public Safety Telecommunications Council that the requirements should “lead to a consistent positive experience from the end-user and PSAP perspective, regardless of the platform on which the 911 call is made.”<sup>23</sup> RingCentral also agrees that “[u]nless there is a specific legitimate technological reason to support a difference, the standards for 9-1-1 call delivery and routing should be the same without regard to technological platform.”<sup>24</sup>

Enterprises that purchase MLTS should be confident that whatever technology platform they use will enable direct dialing, notification, and dispatchable location when deployed and used on-site. Enterprises also must be confident that these MLTS systems will accurately and reliably route 911 calls. RingCentral agrees with the Metropolitan Emergency Services Board that the burden of diagnosing and resolving problems with MLTS/PBX should not fall on public

---

<sup>22</sup> See, e.g., Comments of APCO International, Inc. at 3-4, PS Docket Nos. 18-261 and 17-239 (filed Dec. 10, 2018) (“A dispatchable location should be conveyed with every 9-1-1 call, regardless of the technological platform used.”); Comments of West Safety Services, Inc. at 7-8, PS Docket Nos. 18-261 and 17-239 (filed Dec. 10, 2018) (“West Safety Comments”) (“MLTS needs federal rules requiring dispatchable location be conveyed with all MLTS calls to 9-1-1” due to the “patchwork of state laws that are inconsistent, limited in scope and ineffective due to lack of enforcement or broad exceptions to compliance.”).

<sup>23</sup> Comments of National Public Safety Telecommunications Council at 6-7, PS Docket Nos. 18-261 and 17-239 (filed Dec. 10, 2018).

<sup>24</sup> Comments of the Texas 9-1-1 Entities at 4, PS Docket Nos. 18-261 and 17-239 (filed Dec. 10, 2018) (“Texas 9-1-1 Entities Comments”).



safety responders.<sup>25</sup> RingCentral therefore urges the Commission to adopt and apply the MLTS rules consistently, on a technology-neutral basis.<sup>26</sup>

While RingCentral supports technology-neutral *MLTS rules*, it is crucial that the Commission maintain service-specific 911 rules outside of the MLTS context, and that the Commission make clear where those service-specific rules apply. Each platform presents “legitimate technological reason[s]”<sup>27</sup> for service-specific rules. By way of example, numerous commenters raised the current technological challenges with providing dispatchable location—or any form of automatic location detection—for nomadic interconnected VoIP.<sup>28</sup> In the MLTS context, the Commission can address these concerns by clarifying that the MLTS rules only apply to MLTS deployed on-site, as RingCentral has explained above. Outside of the MLTS on-site setting, there is so much variation in technology and platforms that a single set of rules—particularly for dispatchable location—would not serve the Commission’s goals of improving 911 services.<sup>29</sup>

In particular, adopting rules that are not technologically feasible may harm public safety, as public expectation may outstrip actual service capability. Similarly, a single set of rules

---

<sup>25</sup> See Comments of Metropolitan Emergency Services Board at 4, PS Docket Nos. 18-261 and 17-239 (filed Nov. 5, 2018) (“MESB Comments”).

<sup>26</sup> See Comments of Avaya at 6, PS Docket Nos. 18-261 and 17-239 (filed Dec. 10, 2018) (“The definition of MLTS . . . must be technology neutral and support premise-based and cloud-based solutions.”).

<sup>27</sup> See Texas 9-1-1 Entities Comments at 4.

<sup>28</sup> See, e.g., Comments of Verizon at 8, PS Docket Nos. 18-261 and 17-239 (filed Dec. 10, 2018) (“Verizon Comments”); VON Comments at 6.

<sup>29</sup> See, e.g., Panasonic Comments at 21 (“[I]nsofar as Congress charges the agency to ‘consider’ the feasibility of doing so before adopting new rules, the Commission should view the *NPRM* as a jump-off point for eventual dispatchable location mandates, but it would be premature to adopt infeasible or unrealistic location mandates at this time.”).

would limit innovation and providers' ability to adopt solutions to 911 location detection challenges.<sup>30</sup> The Commission must ensure that it preserves the service-specific distinctions that recognize the technological differences and limitations among services.<sup>31</sup> The Commission should also adopt clear rules so that providers and users know when a system falls within the MLTS rules, and when the service falls within the service-specific rules.

**C. The Record Supports the Need to Clearly Allocate Responsibility between Manufacturers, Sellers, Installers, Operators, and Managers.**

Many commenters share RingCentral's concerns<sup>32</sup> that the rules must clearly allocate responsibility among MLTS manufacturers, sellers, installers, operators, and managers. As AT&T has explained, "[a]ny new MLTS rules should clearly delineate the roles and responsibilities of the various players in the MLTS ecosystem."<sup>33</sup> This is necessary because

---

<sup>30</sup> Numerous service providers and vendors have developed—and are continuing to develop—solutions that enable location detection for emergency calls for MLTS. *See* West Safety Comments at 8 (discussing 911 service solutions for MLTS such as automatic tracking of IP phones, including soft phones and Wi-Fi enabled mobile devices, move/add/change events, and Wi-Fi roaming within an office); RedSky Comments at 18-20 (discussing solutions RedSky has developed for dispatchable location to address user mobility, including a low-cost web-based solution, an integrated on-premise solution, and a cloud-based solution for MLTS vendors); Comments of BluIP, Inc. at 5-6, PS Docket Nos. 18-261 and 17-239 (filed Dec. 10, 2018) ("BluIP Comments") (discussing BluIP solutions that enable specific location information in hotel settings, even where a hotel has not replaced its legacy PBX, as well as development of technology to provide first responders with the same information made available to on-site personnel).

<sup>31</sup> *See, e.g.*, VON Comments at 6 ("While progress has been made, certain limitations currently make it difficult for nomadic VoIP providers to convey reliable, timely, and accurate dispatchable location to the correct PSAP."); *see also* BlueIP Comments at 5-6 ("The Commission should seek to ensure that its rules and policies foster such innovations and not lock in any particular technology or processes that might discourage such innovation.").

<sup>32</sup> *See* RingCentral Comments at 8.

<sup>33</sup> AT&T Comments at 6.

“[a]ny single stakeholder may play multiple roles in the MLTS ecosystem depending on how an MLTS system is configured.”<sup>34</sup>

It is therefore “critically important that the division of responsibility among MLTS market participants be addressed in the resulting regulations”<sup>35</sup> because MLTS owners and operators are “in the best position to determine how to deploy and configure their MLTS systems,”<sup>36</sup> whereas MLTS manufacturers are responsible for making the necessary configurations possible. NENA agrees that MLTS operators/managers are best positioned to coordinate with 911 authorities and emergency call centers to ensure proper installation of their MLTS.<sup>37</sup> For example, MLTS customer engagement is necessary to ensure that MLTS can convey an accurate dispatchable location.<sup>38</sup> As AT&T explains, customers may “unilaterally move telephone stations [after installation] . . . which may require updating the dispatchable location.”<sup>39</sup> The Commission should ensure that the allocation of responsibility for dispatchable location accurately reflects these realities.

Likewise, in the context of notifications, as RingCentral has previously explained, the customer is in the best position to determine the location for the notification requirement, and whether there is any value to notification at all. RingCentral therefore agrees with commenters

---

<sup>34</sup> *Id.*

<sup>35</sup> Comments of USTelecom—The Broadband Association at 1, PS Docket Nos. 18-261 and 17-239 (filed Dec. 10, 2018) (“USTelecom Comments”).

<sup>36</sup> RingCentral Comments at 8.

<sup>37</sup> Comments of the National Emergency Number Association at 5, PS Docket Nos. 18-261 and 17-239 (filed Dec. 10, 2018).

<sup>38</sup> AT&T Comments at 6.

<sup>39</sup> *Id.* at 8.

that “the Commission should clarify that the MLTS installer, manager, or operator need only offer the central notification capability to the customer to be in compliance with the law.”<sup>40</sup>

As USTelecom points out, the key to “ensuring that first responders can locate callers in sprawling spaces such as office buildings, hotels, or campuses” is “recognizing the different roles of the various market participants and their respective responsibilities in the implementation and ongoing functioning of MLTS systems.”<sup>41</sup> RingCentral therefore urges the Commission to clarify the roles of each MLTS participant so that responsibility lies with the party best situated to control that aspect of MLTS.

The Commission must clarify the proposed definitions of MLTS parties to ensure that they are technology-neutral and do not create confusion, particularly for cloud-based MLTS. It is crucial that the Commission clarify that manufacturers and sellers are not installers or managers simply by virtue of providing systems.<sup>42</sup> For example, RingCentral does not agree with AT&T’s suggestion that hosted PBX providers would be installers and managers.<sup>43</sup> Providers of hosted cloud-based PBX may simply provide the MLTS, without installation or implementation of the system after installation. RingCentral previously explained that the broad definition of “installer” could inadvertently include a cloud-based MLTS provider, as the current

---

<sup>40</sup> *Id.* at 7; USTelecom Comments at 4 (“[T]he Commission should make clear that a system installer, manager, or operator has fulfilled its obligation under Kari’s Law so long as the system is properly configured to allow notification transmission to a centralized location.”).

<sup>41</sup> USTelecom Comments at 4.

<sup>42</sup> RingCentral Comments at 9; *see also* USTelecom Comments at 3-4 (“The rules should recognize that Kari’s law and dispatchable location responsibilities will vary based on business arrangements, and ensure that where, for example, an installer plays its traditional limited role, it will not be held jointly liable with the company that controls those functions.”).

<sup>43</sup> *See* AT&T Comments at 6.

definition includes a person who “configures the MLTS or performs other tasks involved in getting the system ready to operate.”<sup>44</sup> The definition of “manager” could likewise inadvertently include a cloud-based MLTS provider, as the definition includes a person who is involved in “implementation of the MLTS after installation.”<sup>45</sup>

**D. The Commission’s Proposal that MLTS Systems Must Be “Pre-Configured” Does Not Align with the Way Cloud-Based MLTS Is Deployed.**

RingCentral shares other commenters’ concern that the proposed definition of “pre-configured” in the MLTS rules obscures the key role of the MLTS Installer and/or Operator, particularly for cloud-based systems. As Microsoft explains, “the definition proposed by the FCC appears to assume that all MLTS come in versions that are ‘plug and play,’ *i.e.*, that a user need to do nothing more than purchase the product (or subscribe to the service), turn it on, and start making emergency calls by dialing only 911.”<sup>46</sup> But this is not the case for many cloud-based MLTS, which require some installation and provisioning by the customer.<sup>47</sup> And of course, the customer or its installer is best positioned to provide such information as dispatchable location or notification details.<sup>48</sup> The proposed definition of “pre-configured” does not acknowledge that an installer must establish PSTN connectivity, with the input from the enterprise.<sup>49</sup>

---

<sup>44</sup> RingCentral Comments at 9 (citing NPRM ¶ 35).

<sup>45</sup> NPRM ¶ 36.

<sup>46</sup> Microsoft Comments at 6.

<sup>47</sup> *Id.*

<sup>48</sup> Verizon Comments at 2-3 (noting that covered entities will need to rely on the enterprise customer regarding any appropriate destination point for the notification, “as the customer is ultimately responsible for matters such as office design, staffing levels, and employee training and duties.”); *see also* AT&T Comments at 8.

<sup>49</sup> Cisco Comments at 9-11.

RingCentral therefore agrees with commenters that the Commission should clarify the definition of “pre-configured” to reflect that “out of the box” default configuration as shipped by the manufacturer still requires proper installation in order for the phone to dial 911.<sup>50</sup> The Commission should allow pre-configuration to be satisfied when a vendor includes software to support a 911 dialing pattern.<sup>51</sup>

### **III. THE COMMISSION SHOULD ENSURE THAT THE 911 RULES ARE TECHNICALLY FEASIBLE AND DO NOT STIFLE INNOVATION.**

Commenters echo RingCentral’s concerns that any rules must be technically feasible<sup>52</sup> and should not stifle the innovation of rapidly evolving technology.<sup>53</sup> Many commenters raise the fact that automatic location solutions are not feasible for all services, noting that it is important to have regulations that enable providers to “fallback” to the registered location option “when dispatchable location truly is not possible under existing technologies.”<sup>54</sup> In this vein, RingCentral reiterates the importance of maintaining flexible dispatchable location requirements for interconnected VoIP providers.

---

<sup>50</sup> Panasonic Comments at 9-10; *see also* TIA Comments at 9-10 (the definition of “pre-configured” should reflect how technology is sold and installed).

<sup>51</sup> Cisco Comments at 12-13; TIA Comments at 9 (the “Commission should clarify that the direct dialing requirement is met as long as an MLTS manufacturer enables an MLTS to direct dial 911 upon proper installation as part of enabling PSTN connectivity.”).

<sup>52</sup> *See, e.g.*, Comments of Hamilton Relay, Inc. at 6, PS Docket Nos. 18-261 and 17-239 (filed Dec. 10, 2018).

<sup>53</sup> *See* Texas 9-1-1 Entities Comments at 2 (“The proposed dispatchable location rules should be modified to . . . allow continued future technological innovations”).

<sup>54</sup> *See, e.g.*, West Safety Comments at 14; *cf.* Comments of Sorenson Communications, LLC at 7, PS Docket Nos. 18-261 and 17-239 (filed Dec. 10, 2018) (noting that the flexible approach to permit TRS providers to fall back to Registered Location options when real-time dispatchable location is not feasible “is the right idea and should be incorporated into the actual rule text.”).

As RingCentral previously explained, automatic location technology is not feasible for many services, particularly for nomadic interconnected VoIP.<sup>55</sup> A vast majority of end user devices “have no internal capabilities to generate a GPS or Wi-Fi location estimate and cannot assist in the generation of a dispatchable location.”<sup>56</sup> As such, the “most reliable way to locate end users is by having them confirm their dispatchable location when using the device.”<sup>57</sup> One commenter suggests that there are readily available device-based hybrid location solutions on the market that will enable interconnected VoIP transmission of dispatchable location,<sup>58</sup> but such solutions are not available for all interconnected VoIP use cases.<sup>59</sup>

The Commission should therefore refrain from mandating “specific location technologies or solutions” in favor of “marketplace flexibility.”<sup>60</sup> Indeed, the Commission should maintain its hybrid rule approach for interconnected VoIP<sup>61</sup> but with necessary modifications to account for

---

<sup>55</sup> RingCentral Comments at 10-11; *see also* VON Comments at 5; Verizon Comments at 8.

<sup>56</sup> AT&T Comments at 9.

<sup>57</sup> *Id.* While AT&T’s discussion is in the context of MLTS, these end user devices are also used for interconnected VoIP. Many providers raised concerns with dispatchable location in the context of mobile uses of MLTS, such as interconnected VoIP. This underscores the need for the Commission to clarify that the dispatchable location rules for MLTS *only* apply in the context of MLTS deployed and used on-site. *See* Section II.A, *supra*.

<sup>58</sup> *See* Comments of Microsoft Corporation at 8-9, PS Docket Nos. 18-261 and 17-239 (filed Dec. 10, 2018).

<sup>59</sup> *See* RingCentral Comments at 11-12; *see also* Ad Hoc Comments at 13 (“Unless and until the Commission actually adopts a definition of ‘dispatchable location’ . . . and settles on a reasonably narrow definition of MLTS, it would be premature to conclude that it is feasible for MLTS operators to satisfy the rules’ requirements [for dispatchable location] based primarily on the representations of various vendors that their products have solved the problem of transmitting accurate location information.”).

<sup>60</sup> Bandwidth Comments at 6 (quoting NPRM ¶ 59).

<sup>61</sup> *See* West Safety Comments at 13; *see also* Verizon Comments at 8 (“Many nomadic VoIP providers must rely on a customer or end user to timely and accurately provide a dispatchable

the realities of nomadic VoIP. As RingCentral has explained, under the Registered Location requirements for a VoIP service “capable of being used from more than one location,” service providers must be able to “identify whether the service is being used from a different location” to either “prompt the customer to provide a new Registered Location” or “update the Registered Location without requiring additional action by the customer.”<sup>62</sup> While this is possible in some situations, there are certain applications—such as browser-based applications or VPNs,<sup>63</sup> where the provider may not be able to detect a user’s location, much less identify that the service is being used “from a different location than the Registered Location.” In the case of browser-based applications, these are design features for security and privacy, rather than flaws.

As RingCentral has explained, the Commission should avoid dispatchable location requirements that are not technologically feasible.<sup>64</sup> Such requirements stifle innovation and pose safety risks where the technology does not align with user expectations. Accordingly, the Commission should maintain flexibility in the location requirements for interconnected VoIP.

In addition, as suggested by Sorensen, the Commission should endorse the use of National Emergency Call Centers for inherently mobile use and/or use where the provider has

---

location and, to be consistent with the intent of the *Notice*, the rules should maintain the current registered location approach as a meaningful option for these services.”).

<sup>62</sup> RingCentral Comments at 10 (citing NPRM at App’x A (Proposed Rules), § 9.11(b)(4)(i)(C)).

<sup>63</sup> *Cf.* Comments of TIA at 17-18 (“Ensuring accurate location data is difficult, if not impossible, for an end-user connected remotely to an enterprise via a VPN [in the context of MLTS].”).

<sup>64</sup> RingCentral Comments at 12.



reason to believe available location information may not be reliable.<sup>65</sup> Just as in the case of VRS systems, building in this type of redundancy is important to address challenges associated with location detection and call routing for nomadic interconnected VoIP users. While RingCentral agrees in part with the Metropolitan Emergency Services Board that routing calls from MLTS/PBX, ECS, and VoIP to national call centers should not be encouraged as a routine solution,<sup>66</sup> call centers can provide a prudent backstop by ensuring that 911 calls are answered quickly by trained personnel with the means to deliver emergency calls to the right emergency responders. An emergency call center provides valuable redundancy to enable calls to get to emergency responders quickly in the rare cases where traditional routing fails, a dispatchable address is not available, or the provider has reason to believe the dispatchable address may be incorrect.

---

<sup>65</sup> Sorenson Comments at 10-11; *see also* West Safety Comments at 17-18, (describing the importance of the Emergency Call Relay Center, which acts as a backup for VoIP emergency routing services for unprovisioned and failover 911 calls).

<sup>66</sup> MESB Comments at 7.

#### IV. CONCLUSION

As the Commission adopts rules to implement Kari's Law and Section 506 of RAY BAUM'S Act, RingCentral urges the Commission to create clear and flexible rules that address the realities of today's technology and do not stifle innovative solutions for 911 calling.

Respectfully submitted,

/s/ Rachel Warnick Petty  
Rachel Warnick Petty  
Assistant General Counsel  
RINGCENTRAL, INC.  
20 Davis Drive  
Belmont, CA 94002  
(650) 458-4110

/s/ Brita D. Strandberg  
Brita D. Strandberg  
Susannah J. Larson  
HARRIS, WILTSHIRE & GRANNIS LLP  
1919 M Street, NW, 8<sup>th</sup> Floor  
Washington, DC 20036  
(202) 730-1300

*Counsel to RingCentral, Inc.*